

A NEW SPECIES OF *CARISTANIUS* FROM FLORIDA
(LEPIDOPTERA: PYRALIDAE: PHYCITINAE)^{1, 2}

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Abstract.—*Caristanius minimus*, new species, is described from the Florida Keys. The larval host is *Cassia keyensis* (Pennell) MacBride.

During a study of the immature phycitines associated with leguminous plants in the southern United States, an undescribed species of *Caristanius* was collected. This paper provides a name so that information on the immature stages and biology of this species can be included, along with similar information on other legume-feeding phycitines, in a subsequent publication.

Caristanius minimus Neunzig, new species
(Figs. 1-6)

Wing expanse.—16-19 mm.

Head.—Male: Brown to purplish brown, dusted with white; labial palpi purplish brown and/or fuscous dusted with white. Female: Fuscous to purple, dusted with white; labial palpi mostly fuscous dusted with white.

Thorax.—Male: Collar and dorsum brown or purplish brown. Female: Both collar and dorsum somewhat darker, at times, with scattered fuscous or black scales.

Primaries.—Male: Brown, or purplish brown, moderately to heavily dusted with white (white particularly strong in median area); antemedian line indistinct, or absent, anteriorly, becoming distinct and broad in posterior half of primary; preceding antemedial line a black patch on inner margin extending to or into cell (patch occasionally with some purplish brown scales); subterminal line sinuate; usually relatively distinct; discal spots usually relatively distinct, close together, but separate, sometimes slightly fused; a row of black dots along termen. Female: Usually with darker (fuscous) ground color (sometimes partially overlaid with purple); less white dusting, and discal dots obscure.

Secondaries.—Male: Translucent, whitish with brown extending onto wing from costal margin, and a narrow brown line along termen. Female: Dark shading of wing more extensive.

Genitalia.—Male: Uncus with posterior margin convex, and with distal extremities of arms strongly angulate; costa of valve broadly and strongly sclerotized, produced into a relatively large inwardly and evenly curved, apically pointed process; sacculus short, bluntly produced at apex; cucul-



Figs. 1, 2. *Caristanius minimus*. 1, male (holotype). 2, female.

lus elongate, weak; anellus with 2 elongate lobes with slender extremities; aedeagus elongate, armed with a single cornutus and numerous very small spines and granulations (cornutus about $\frac{1}{2}$ as long as aedeagus); vinculum longer than greatest width. Female: Granulations of ductus bursae extending for a very short distance into corpus bursae; signa present in posterior half of corpus bursae, strongly developed into a series of heavily sclerotized, fused plates possessing inwardly directed spines; anterior half of corpus bursae granulate; eighth-segment collar incomplete ventrally, strongly sclerotized dorsally.



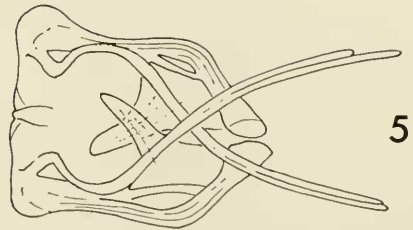
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Figs. 3-6. *Caristanius minimus*. 3 and 4, male genitalia (holotype). 5, male tufts of 8th abdominal segment (holotype). 6, female genitalia.

Holotype.—Big Pine Key, Florida, ♂, reared from larva collected 9-V-73, *Cassia keyensis*, Coll. H. H. Neunzig. USNM Type No. 73783, ♂ genitalia slide 359; in the National Museum of Natural History (USNM).

Paratypes.—FLORIDA: Big Pine Key, 1♀, reared from larva collected 9-V-73, *Cassia keyensis*, Coll. H. H. N.; 13♂, 1♀, 9-V-73, light trap, Coll. H.H.N.; 2♂, 1♀, 10-V-73, light trap, Coll. H.H.N.; 1♂, 5-IX-74, light trap, Coll. H.H.N.; 2♀ reared from larvae collected 6-IX-74, *Cassia keyensis*, Coll. H.H.N.

The three paratypes collected at a light trap 10-V-73, and the two paratypes reared from larvae collected 6-IX-74 have been placed in the National Museum of Natural History (USNM). The remaining paratypes are in the North Carolina State University Museum.

Larval host.—*Cassia keyensis* (Pennell) Macbride.

Distribution.—Known only from Big Pine Key, Florida.

Discussion.—*Caristanius minimus* differs from other species of *Caristanius*, described in Heinrich (1956), in being smaller. *Caristanius minimus* has an average wing expanse of only 17 mm, whereas, other species in the genus average about 22 mm.

The maculation of *C. minimus* is similar to *Caristanius decoloralis* (Walker) but the former species usually has a darker patch of scales preceding the antemedial line on the inner margin of the wing.

On the basis of genitalia, *C. minimus* appears to be closely allied to *Caristanius pellucidellus* (Ragonot). There are, however, differences in the male genitalia of the two species, particularly in the appearance of the costa of the valve. This part of the valve is produced into an evenly curved, apically pointed process in *C. minimus*, in contrast to an apically rounded, folded and contorted costa in *C. pellucidellus*.

Literature Cited

- Heinrich, C. 1956. American moths of the subfamily Phycitinae. U.S. Natl. Mus. Bull. 207. 581 pp.

Footnotes

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